

IN THE CLAIMS:

1. (Currently Amended) A method of coating a medical device comprising:
interfacing a therapeutic with a supercritical fluid upstream of a control valve;
transporting, within a conduit, the interfaced therapeutic and supercritical fluid towards
the medical device; and,
transferring the therapeutic from the supercritical fluid to the medical device.
2. (Currently Amended) The method of claim 1 further comprising:
applying a carrier coating to the medical device,
wherein the therapeutic is expelled from the conduit prior to being transferred
from the supercritical fluid to the medical device; and
wherein the control valve regulates the degree of flow within the conduit.
3. (Original) The method of claim 1 wherein transferring the therapeutic from the
supercritical fluid to the medical device includes spraying the supercritical fluid at the medical
device.
4. (Original) The method of claim 1 wherein transferring the therapeutic from the
supercritical fluid to the medical device includes exposing the medical device to a bath of
supercritical fluid.
5. (Previously Presented) The method of claim 1 wherein the therapeutic substantially
dissolves in the supercritical fluid.
6. (Original) The method of claim 1 wherein the therapeutic is colloidally suspended in
the supercritical fluid.
7. (Original) The method of claim 1, further comprising:
applying a vacuum force to a chamber containing the medical device.

8. (Original) The method of claim 1 wherein the therapeutic is combined with a carrier coating.
9. (Original) The method of claim 1 further comprising:
collecting the supercritical fluid after transferring the therapeutic from the supercritical fluid to the medical device; and
removing residual therapeutic from the supercritical fluid after collecting the supercritical fluid.
10. (Original) The method of claim 1 wherein the supercritical fluid is supercritical carbon dioxide and the therapeutic is paclitaxel.
11. (Original) The method of claim 1 wherein the medical device is chosen from a group consisting of a stent, a peripherally inserted central catheter, an angio-catheter, a stent-graft, a vena-cava filter, and an aneurysm coil.
12. (Currently Amended) A method of treating a medical device comprising:
coating the medical device;
interfacing a therapeutic with a supercritical fluid; and
swelling the coating on the medical device prior to exposing the coating on the coated
medical device to the supercritical fluid that has been interfaced with the therapeutic.
13. (Original) The method of claim 12 wherein exposing the coating to the supercritical fluid includes spraying the supercritical fluid at the medical device.
14. (Previously Presented) The method of claim 12 wherein exposing the coating to the supercritical fluid includes flooding a coating chamber with the supercritical fluid after the therapeutic has been interfaced with the supercritical fluid.
15. (Currently Amended) The method of claim 12 wherein ~~further comprising:~~

swelling the coating includes by exposing the coating to a supercritical fluid, ~~before exposing the coating on the coated medical device to the supercritical fluid that has been interfaced with the therapeutic.~~

Claims 16-20 have been canceled without prejudice to the subject matter therein.

21. (Currently Amended) ~~The~~ A method of coating a medical device comprising:
interfacing a therapeutic with a supercritical fluid;
transferring the therapeutic from the supercritical fluid to the medical device; and,
applying a vacuum force to a chamber containing the medical device.

22. (Currently Amended) A method of coating a medical device comprising:
interfacing a therapeutic with a supercritical fluid;
transferring the therapeutic from the supercritical fluid to the medical device;
collecting the supercritical fluid after transferring the therapeutic from the supercritical
fluid to the medical device; ~~and;~~
removing residual therapeutic from the supercritical fluid after collecting the supercritical
fluid; and,
reusing the residual therapeutic by interfacing the residual therapeutic with a supercritical
fluid.